

Title:	DS-K1100 Series Card Readers Connect to DS-K2600 Series Access Controllers by RS-485	Version:	v1.0	Date:	6/21/2017
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DS-K1100 Series Card Readers Connect to DS-K2600 Series Access Controllers by RS-485

Preparation

Connect card reader to access controller is mainly applied to swiping card to open the door for entering or exiting. The models of card reader and access controller in this guide are as below:

Card Reader	Access Controller
DS-K1101M/MK, DS-K1102M/MK, DS-K1103M/MK, DS-K1104M/MK, DS-K1107M/MK, DS-K1108M/MK	DS-K2601, DS-K2602, DS-K2604
DS-K1102E/EK, DS-K1107E/EK, DS-K1108E/EK	

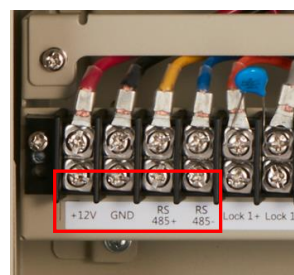
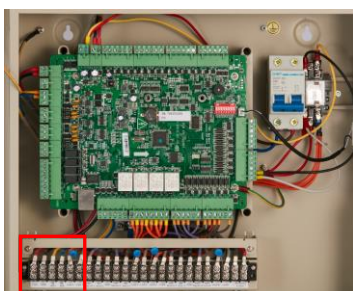
Notice

1. Please cut off power supply before wiring;
2. DS-K1100 Series Card Readers support private RS485 protocol; the details about RS-485 about of card reader are as below:



Color	Description
Red	Power (DC +12V)
Black	GND
Yellow	RS-485+
Blue	RS-485-
Green	W0 (available for Wiegand Protocol)
White	W1 (available for Wiegand Protocol)
Purple	Beep Control (available for Wiegand Protocol)
Brown	Blue/Green LED Control (available for Wiegand Protocol)
Orange	Red LED Control (available for Wiegand Protocol)
Gray	Tamper (available for Wiegand Protocol)

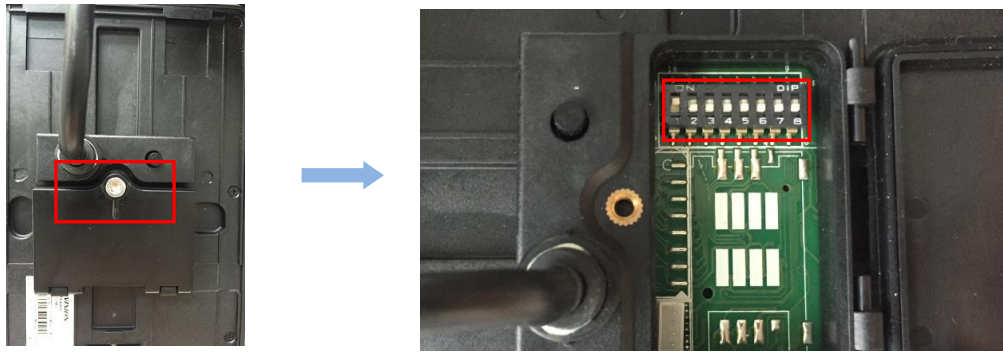
3. Correspondingly, there are RS485 interfaces in DS-K2600 series access controllers; you can find RS-485 interface at the same position in DS-K2601/02/04 access controllers, as pictures show:



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4. Please check the rear panel of card reader and unscrew it, you could find DIP switch module;
The No. of DIP switch from left to right is 1~8:



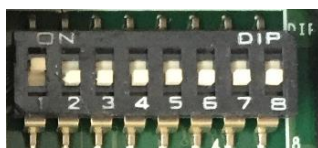
Description of DIP Switch:

Icon	Description
	Represent 1 in binary mode
	Represent 0 in binary mode

No.	Description	DIP Switch Status
1~4	Address of RS485	1: 1 0: 0
5	Read card No. or file in card(Reserved)	1: read file in card 0: read card No.
6	Wiegand protocol or RS-485 protocol	1: Wiegand protocol 0: RS-485 protocol.
7	Wiegand Protocol (available when No. 6 is 1)	1: Wiegand protocol of 26-bit; 0: Wiegand protocol of 34-bit.
8	Matched Resistance(Reserved) (available for RS-485 protocol)	1: Enable; 0: Disable.

Step 1: DIP Switch

Please set the DIP switch firstly before connecting the card reader, more details about the binary value of the card reader by setting DIP Switch to correspond with the door, please check the table below:



DIP Switch Status	Door	Reader
1000 0000	Door 1	Entrance Reader 1
0100 0000		Eixt Reader 2
1100 0000	Door 2	Entrance Reader 3
0010 0000		Eixt Reader 4
1010 0000	Door 3	Entrance Reader 5
0110 0000		Eixt Reader 6
1110 0000	Door 4	Entrance Reader 7
0001 0000		Eixt Reader 8

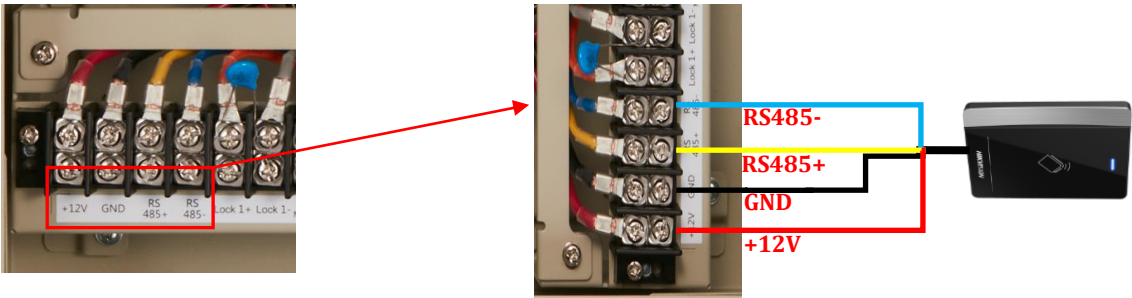
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For example, if you want to swipe card to open the first door, no matter your access controller is DS-K2601, DS-K2602 or DS-K2604, the binary value of the entrance card reader should be 1000 0000 and the binary value of the exit card reader should be 0100 0000.

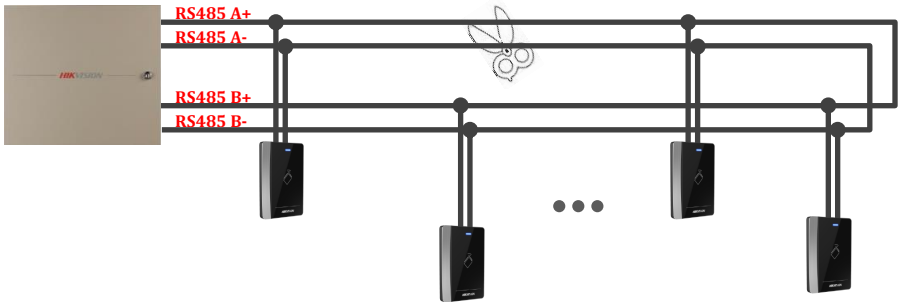
Step 2: RS-485 Wiring

Please connect card reader to access controller as following picture:



Note

1. Actually you can find RS485 A/B/C/D interfaces in access controller; we extend RS485 A interface to the wiring distribution for easier cable connection and we use RS485B interface for backup, the cable connection as following picture:



2. About wiring materials, we suggest customer choose RVVP cable.

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